

U.S. Department of Energy  
Washington, D.C.

PAGE CHANGE

DOE O 420.1 Chg 1

11-16-95

SUBJECT: FACILITY SAFETY

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1. PURPOSE. To transmit revised pages to DOE O 420.1, FACILITY SAFETY, of 10-13-95.
  2. EXPLANATION OF CHANGE. Based on a decision by the Directives Management Board, Departmental Safety Orders, and other selected Orders will reflect no expiration date to clarify that they will remain in effect until superseded or replaced. Therefore, these Orders will show only an Approval Date and Review Date. The Directives System review cycle is discussed in DOE M 251.1-1, DIRECTIVES SYSTEM MANUAL, of 10-16-95.
  3. FILING INSTRUCTIONS.
    - a. 

<u>Remove Pages</u>	<u>Dated</u>	<u>Insert Pages</u>	<u>Dated</u>
1 and 2	10-13-95	1	11-16-95
		2	10-13-95
    - b. After filing the attached pages, this transmittal may be discarded.

BY ORDER OF THE SECRETARY OF ENERGY:



ARCHER L. DURHAM  
Assistant Secretary for  
Human Resources and Administration

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Office of Human Resources and  
Administration

# U.S. Department of Energy

Washington, D.C.

## ORDER

DOE O 420.1

Approved: 10-13-95  
Review Date: 10-13-97

**SUBJECT:** FACILITY SAFETY

Chg 1: 11-16-95

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1. OBJECTIVE. The objective of this order is to establish facility safety requirements related to: nuclear safety design, criticality safety, fire protection and natural phenomena hazards mitigation.
  2. CANCELLATION. The Orders listed below are canceled. Cancellation of an Order does not, by itself, modify or otherwise effect any contractual obligation to comply with such an Order. Canceled Orders which are incorporated by reference in a contract shall remain in effect until the contract is modified to delete the reference to the requirements in the canceled Orders.
    - a. DOE5460.28, NATURAL PHENOMENA HAZARDS MITIGATION
    - b. DOE5480.7A, FIRE PROTECTION
    - c. DOE6430.1A, GENERAL DESIGN CRITERIA (NUCLEAR AND EXPLOSIVES SAFETY REQUIREMENTS)
    - d. DOE5480.24, CRITICALITY SAFETY
  3. APPLICABILITY.
    - a. DOE Elements. Except for the exclusions in paragraph 3c, this Order applies to DOE Elements with responsibility for DOE-owned or leased facilities as follows (see Attachment 1, Table 1, "Facility and Activity Applicability"):
      - (1) 4.2, 4.4 All DOE nuclear and non-nuclear facilities.
      - (2) 4.1, 4.3 All DOE non-reactor nuclear facilities which are classified as Hazard Categories 1, 2, or 3; and explosives facilities.
    - b. Contractors. Except for the exclusions in paragraph 3c, the Contractor Requirements Document (CRD), Attachment 2, sets forth requirements that are to be applied to the universe of contractors awarded contracts for management and operating contracts. Contractor compliance with the CRD will be required to the extent set forth in a contract. Contractors shall be directed to continue to comply with the requirements of Orders canceled by this Order until their contracts are modified to delete the reference to the requirements of the canceled Orders.

Vertical line denotes change.

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c. Exclusions.

- (1) Activities that are regulated through a license by the Nuclear Regulatory Commission (NRC) or a State under an Agreement with the NRC, including activities certified by the NRC under section 1701 of the Atomic Energy Act;
- (2) Activities conducted under the authority of the Director, Naval Nuclear Propulsion Program, as described in Public Law 98-525;
- (3) Activities conducted under the Nuclear Explosives and Weapons Safety Program relating to the prevention of accidental or unauthorized nuclear detonations to the extent a requirement under this part cannot be implemented for a particular facility in a manner that does not compromise the effectiveness of such activities;
- (4) Activities that are regulated by the Department of Transportation or pursuant to 49 CFR 173.7(b);
- (5) Accelerator facilities that are covered by DOE Order 5480.25 (excluded from ss4.1 and 4.3 but not from ss4.2 and 4.4.);
- (6) Fusion facilities (excluded from ss4.1 and 4.3 but not from ss4.2 and 4.4.).

4. REQUIREMENTS. Each section of this Order has specific requirements, and where appropriate schedules for implementing requirements and specific exemptions, which are provided in the following corresponding sections of this Order. In complying with the provisions of this Order, determinations regarding the acceptability of design should include comparison with existing safety basis information; if available. All new construction, shall, as a minimum, conform to the Model Building Codes applicable for the state or region, supplemented with additional safety requirements associated with the hazards in the facility in a graded manner.

Guidance associated with this Order are not mandatory requirements. The guidance provided in implementation guides and standards referenced therein are acceptable methods to satisfy the requirements of this Order. Alternative methods that satisfy the requirements of this Order are also acceptable. Any implementation method selected must be justified to ensure that an adequate level of safety commensurate with the identified hazards is achieved.